

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Mon, 26 Jun 1995 11:54:30 +0200
From: Goran Hosinsky <hosinsky@royac.iac.es>
Subject: [1231] Re: Twin Lead
Message-ID: <9506260954.AA03419@royac8.royac.iac.es>

Hi!

If you have any possibility of measuring RF impedance, with a noise bridge, a Autek RF-1 meter or such you can measure the impedance of the unknown line:

- 1) put a non inductive resistor across one end of the line
- 2) measure the input impedance of the line at several frequencies, best at $1/4$ wavelength, $1/2$ etc.
- 3) If the input impedance stays the same for all frequencies the line has the impedance of your load resistor, if not adjust the resistor value.
- 4) To find the velocity factor you can use a GDO, looking for the resonance with the far end of the line shorted. This will be where the line is half a wavelength long (if it is the lowest resonance point, otherwise $n \times$ halfwave). An impedance meter can be used in the same way looking for the minimum impedance points.
- 5) if you can measure the minimum impedance points with the shorted line you can calculate line loss with the formulae from the ARRL handbooks giving loss as a function of input SWR for a shorted line.

Good luck!

73 Goran ea8yu hosinsky@royac.iac.es

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Mon, 26 Jun 95 09:30:02 MEZ
From: Urs Schlegel <schlegel@ccgate.ari.ch>
Subject: [1232] Re: keyer mode questions
Message-ID: <9506260930.A10274@ccgate.ari.ch>

>So, what do you think: which mode is better, and why? Or perhaps I should
>put it like this: how can I figure out which mode will better suit me?

>Bernard, KB2TGH.

I use a "paddle" and the mode, which sends no opposite sign after I release the paddle (is it A or B?) The reason was, that I could use the paddle like a key with different knobs for dit and dah during learning. I later get used to squeeze the paddles for K, C, A and so.

73 de Urs, HB9HAU schlegel@ccgate.ari.ch

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Sun, 25 Jun 1995 20:38:26 -0700
From: aa7qy@primenet.com (Roger Hightower)
Subject: [1233] Field Day
Message-ID: <199506260338.UAA04595@mailhost.primenet.com>

Well, it's over. Interesting exercise...my first as a QRP station on natural power.

Lots of activity, as I'm sure you all know, but not too many folks had ears for qrp stations. Most of my contacts were with the West Coast, Texas and Colorado. I did pick up Utah, Idaho and South Dakota, which are rare in any case.

31 qso's only, but had limited operating time and was stuck on 40M the whole time. The only qrp-1'er I heard was NA5N answering someone else's CQ, and didn't have a chance to call him since the freq was in use.

I ran the QRP+ to a random wire with a 7.5 amp gel-cell charged by a solar panel, and did have a lot of fun. CW only, since I haven't received the back-ordered mike and haven't gotten around to making one that works.

The real excitement of the weekend was a Saturday night visit by a black bear some 30 yards from my station, tearing up a stump looking for grubs. Abby, my Springer Spaniel did a lot of woofing and growling, but fortunately did not get the bear's attention. It did put an end to the night-time ops, though. Discretion, valor and that sort of thing. Fear, really :-)

Hope all had a great time. Sorry I missed you, and will work harder next time. Maybe the QRP afield thing this fall.

72/73, de Roger, AA7QY
aa7qy@primenet.com rhigh@aztec.asu.edu Ham Radio: AA7QY@KC7Y.AZ.USA.NA

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Sun, 25 Jun 1995 20:00:10 -0500 (CDT)
From: stugordistr@CRF.CUIS.EDU
Subject: [1234] Pixie 2
Message-ID: <Pine.3.89.9506251906.A539181440-0100000@CRF.CUIS.EDU>

I just recieved my first edition of QRPp and loved every page of it.
I've decided to give the Pixie 2 a try, and aquired a Altoids box to put
it in. Thanks everyone for the tip. As I look at the amazingly simple
circuit, I wonder about the recieve proformance of this transciever. Is
there anyone on the list here who has used this radio who can tell me
about the recieve preforemance. I can't see how it even detects the signal!

72 de,

=====

Timothy R. Gordish	InterNet: stugordistr@crf.cuis.edu
(219)471-3155	Packet: KD4URL@W9INX.IN.US.NA

"If it's not a Mac then it's an imitation!"

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Sun, 25 Jun 1995 20:44:39 -0400
From: dcwill@ix.netcom.com (Dave Williamson aa4zx/8)
Subject: [1235] qrp+ ... should I?
Message-ID: <199506260132.SAA28527@ix3.ix.netcom.com>

I am thinking of selling off my Yaesu FT-840 and picking up a QRP PLUS.
Have any of y'all with QRP+s used the '840 or similar rigs? I've read some
of the comments on the 'plus here, and it sounds good (wish the keyer had
continuous rather than discrete speed control, could use a lamp for the LCD
display...) and looks really neat. Mainly I'm curious how the 'plus's
receiver compares to that of the '840.

Any other comments welcome, too.

Thanks in advance es 73 de dave / aa4zx/8
nr elkins, wv

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Sun, 25 Jun 1995 19:05:01 -0700
From: nwqrp@scn.org (SCN User)

Message-ID: <199506260205.TAA15619@scn.org>

Whew ... what a weekend! The NW QRP Club's Field Day effort was a lot of fun. We had visits from two local papers (SW Wash. area). We made 2nd page of one of them on Sunday with a picture of Bill, N7MFB working RS-12 with two QRP +s. The uplink used a tuned 20m loop (reduced size, mast mounted at about 15-20'). The downlink used a 15m/10m yagi at about 25'. Unfortunately, the caption in the photo said we were just tuning in a broadcast. Oh well. We expect to have something in a weekly paper as well. We also used a 80m Bic (TM) dipole at 50' fed with 300 Ohm tv twin lead, a sloping 40m loop, two 20m phased verticals, a 10/15/20m 3 ele. yagi, and a 5 ele. yagi for 2m at about 30'.

The Bic (TM) worked well on 40, but the loop (sloping to about 8') did better. We did use the Bic (TM) all night on 80m and 75m SSB. I made it the night before we left ... what a light-weight antenna! I will use it backpacking this summer (to Alberta I think). I may want to build one of Roy's (W6EMT) "Z-Match" tuners. His was really nice. (He had a great CMOS Memory Keyer also ... Thanks Roy!)

I hope y'all had a ball as well. I bet you did!

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From qrp-l@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Sun, 25 Jun 1995 12:51:00 -0500
From: brian.carling@acenet.com (Brian Carling)
Subject: [1237] Re: Mizuho HF QRP rigs!
Message-ID: <2a6.32257.500@acenet.com>

This message was from JGRAMSEY to ALL,
originally in conference RADIOSWAP_
and was forwarded to you by BRIAN CARLING.

SB xcvr
Message-ID: <3sfsit\$b58@newsbf02.news.aol.com>
Newsgroups: rec.radio.swap
Organization: America Online, Inc. (1-800-827-6364)

Give us a call at 1-716-924-4560 to see what stock we have available. We
bought out the inventory of J-Com (which sold the Mizuho) and are closing
them out at COST!

73, John Ramsey, Ramsey Electronics

SLMR 2.1a Sticker seen on the Enterprise computer: MADE IN MEXICO

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Sun, 25 Jun 1995 21:41:29 +0000
From: plquick@facstaff.wisc.edu (Paulette Quick, N90UH)
Subject: [1238] Memory Keyers
Message-ID: <199506260239.VAA17977@audumla.students.wisc.edu>

A question for experienced qrpers:

Do you use a memory keyer? In a contest, such as this past weekend's Field
Day, I preferred to tap out each character myself, even if it meant lots of
repetition.

What do you prefer?

72 de N90UH
Paulette Quick
plquick@facstaff.wisc.edu

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Sun, 25 Jun 1995 19:00:03 -0500 (EST)
From: NYOUNG@nova.wright.edu
Subject: [1239] FD '95 Report from La Estancia de los Guajalotes Sonrientes

Message-ID: <01HS4SR8LR6A8WZRU1@nova.wright.edu>

Ok, so I get home from work on Friday, having field tested the Argosy set up on the parking lot light poles. So I unpack everything and put it back in the shack and go out to eat and take my medication and try to keep from going out into the shack but I can't. So I futz around out there for a while and then come in. Cindy catches me at the fridge: "Mom called. Tomorrow is the Fire House Pancake Breakfast. We're going to go over around 9 and eat and then watch the parade. And you have a haircut appointment at 12:30."

I wish I had more whiskey. I drink some seltzer with a twist of lime and go back out to the radio shack. I solder some wires together and burn myself and then come inside and prepare to crash.

I get up the next morning around 8. Andy (the youngest) is downstairs watching some sort of mind-numbing anti-intellectual pap on "Nicktoons." I go out to the shack and look at some stuff. I can feel one of those killer headaches coming on. I go into the house and eat two ibuprophens and two acetaminephens and drink a big glass of water. Cindy shows up. We begin the Saturday morning rushing around and getting ready to do something that we call relaxing. We find my keys. We go to grandma's and the firehouse and eat and watch the parade. The headache as begun to tip the scales toward minor convulsions in a dark room waiting for a quiet death. I go back home, eat some more pain killers, drink a half an espresso and go back to get my hair cut.

"I hope this haircut can kill this headache," I say, walking in the door. The scissor-wielding blond (I'm not so far gone I can't recognise good-looking women) says "Sit down, honey. I'll be right with you." I sit. She cuts my hair. It's a Hemingway bit. Simple sentences.

A conversation. She finishes my hair. I look in the mirror. I look good. I am ready for a job interview. I look normal. My headache is gone. I pay and give her a substantial tip.

When I get home, all the pain killers have finally taken control of my brain. I go upstairs, put on my cut-off jeans and pass out. Five hours later, around 6 p.m., Cindy comes up to get me. We have a dinner reservation at one of the fancy places downtown. One of the few places downtown still open, now that everyone else has fled to white suburbia and the security of little housing developments where you can't put up an antenna. Been there. Done that.

We go to eat. The food is good. I get to thinking about Vygotskian stuff and write a whole course outline on a dinner napkin. A paper one. The table, in fact, is covered with a square of white paper. I write more stuff on it. Cindy and I talk. Caves, buildings, how the food tastes. Postmodernism. The usual.

We go home. I go out to the radio shack. Everyone is having a good time. I have decided that I will not start out 1D and then suddenly become 1B or something. I check the equipment. It works. I am happy. I go in the house, take a shower and hit the sack.

Sunday morning dawns. I get up and find Andy watching some more mindless

pap. Out in the radio shack, I open up the Argosy and change the timing on the AGC. Then... ah, then.. then I notice why the frequency has been so jumpy. I park the radio and listn. The freq shifts. The back thrust bearing on the PTO is cracked. Straight through. And now... now comes the interesting part.

I set to removing the PTO. In the course of leaning over the bench to fix the radio, I somehow screw up my back. I have to very carefully pull myself erect, lower myself into a chair and then try to figure which way to lean so that I don't get the "knife in the back" pain to which I have become not at all accustomed over the past 10 years or so. And I still have to fix the PTO.

To make an already long story short, by the time I fixed the PTO (and it's weird why Ten Tec never made the shaft on the PTO run to ground... thus leaving the user with a strange "hand capacity effect" or whatever they used to call it), it's 1 hour left of FD. I listen around. Everyone is very slow and very quiet and I think that they must be all just about burned out. I go back into the house, take four each of every pain killer that I've got and go upstairs to lay down. Cindy has stripped the sheets off the bed. The PTO is fixed and I could give a hoot less about civility. I roll, groaning in pain, onto the bed and fall asleep. Three hours later, the pain is still there and now... now it's time to go to the grocery.

So my FD experience this year -- one that would, I thought, mark an end to nearly 10 years of radio silence in this house -- came out to this:

1 contact. On 40m. The Friday before FD. 5 watts into a light pole in the university parking lot. Great fun, this.

So, how'd it go for youze people? Chigger bites? Lyme disease? Cold beer? Warm beer? Wasps come zooming in? Fall asleep over the key, sending out a continuous stream of "dits"? Run out of gazoline? Oh, weather. How was the weather? I think we need a complete rundown on the weather. Yep.... so....

The weather here was sunny on Friday, very hot and humid with a few thunder showers now and then. The lightning did not hit the light pole. I was careful. ON Saturday it was on and off again and it didn't make much difference anyway. Hot and humid. Sunday, I don't know. I slept through some of it. AND the rest of the time I was too busy cussing and groaning.

Oh, did I mention that I also had to take Andy over to the crazy toy store to get him a "big, rubbery fish"? Well, I did that too. It was cool. They have rubber chickens and rubber fish and rubber faces. There's one that hs a bunch of fingers where the mouth should be. One of Ian's friends wore one on the way to the house on Halloween. Scared the crap out of Andy. He had a little problem with that "momentary

suspension of disbelief" thing. Wayne came in the house. Andy took one look at Wayne. Wayne made the fingers wiggle. Andy ran and hit behind his mother. SO much for the big rubbery Wayne. That's why we had to get the big rubbery fish. Appease the rubbery gods, I think it was.

73

Nils

WB8IJN &c

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Sun, 25 Jun 1995 21:35:59 -0400
From: JCoote@aol.com
Subject: [1240] Re: Grounding and Random Wires
Message-ID: <950625213558_78132743@aol.com>

What do I think of random wires?... hmmm, this will be a long one. Be patient.

Length:

There is too much fuss about length. If the antenna is around 1/4 to 1/2 wavelength at the lowest freq, it will work effectively on that and all higher bands. Old ham texts about 67' or 134' of wire date back to the 1930's and 40's when the PA tank circuits connected directly to the antenna (no coax). The antennas then had to be specific lengths. 50-60 years later we have NINE bands and tuners. Whatever length works with your tuner on all nine bands is "the" length.

Antenna pattern:

A random wire will probably be used in temporary, concealed or other less-than-perfect sites where ground or nearby objects interfere with the pattern. In the clear, a straight horizontal wire run will behave similarly to a horizontal dipole. If the length of a straight random wire is several wavelengths, lobes develop off the ends of the wire. The longer the wire at frequency, the more directive off the ends. Random wires many wavelengths at frequency are called longwires and have been used for their directive properties. A typical random wire, 50' to 150' in length and 30' above ground will generally have medium and high-angle properties on the lower HF bands; high and medium angle properties on the high HF bands. I have also deliberately kept wire antennas below 30' above ground for high-angle work (NVIS) on 1.8-7 MHz.

Portable/Emergency/Concealed use:

The random wire lends well to these operations because there is only a single, thin conductor to deal with (no coax or balanced line). The antenna may be thrown over roofs or trees. It may be dropped from a high-rise

balcony. It may be shaped like "V", "L", "sloper" or other antennas with similar performance. The random wire requires fewer supports than coax-fed or balanced antennas.

Ground or Counterpoise:

The random wire must be operated "against" a ground or counterpoise. (You wouldn't feed just half of a dipole). Hams have to remember that the counterpoise for a random wire is like the "opposite leg" of a dipole...it should be treated as a radiator. Large ground rods in the earth may be suitable for VLF or lightning protection, but are not as efficient at HF.

(Compare a dipole to a 1/4 wave vertical with a ground rod). The length of the counterpoise wire (s) may be whatever works with your tuner and antenna on all nine bands. Some people will use a 1/4 wave radial for each band which produces a "hot" tuner chassis. Some have used a counterpoise which lies under the length of the flat-top portion of an L-shaped random wire. The counterpoise under the antenna is said to improve on high-angle work by acting a little like a reflector in a beam antenna. A few hams have used an MFJ "Artificial Ground" which is simply a series L-C tuner connected between the GROUND terminal of the tuner and the counterpoise. It is said that tuning the counterpoise keeps RF off the chassis and may improve the radiated signal. With the antenna up and in place (especially a concealed antenna) it may be easier to play with the counterpoise length to get the system to work on all bands.

Drawbacks of random wires:

In some concealed and temporary installations, part of the antenna will be indoors or will run close to the plumbing, wiring, utilities or metal mesh in the building. In comparison, a center-fed antenna and TV or ladder-line will get most of the radiating portion of the antenna up and away from the building.

Tuners for random wires:

Most ham tuners for sale, or magazine projects are variations of the T-network. With sufficient L and C, the tuner should cover 1.8-30 Mhz with a few tries at finding a wire and counterpoise length. Useful L might be 0-25 uH. Useful C might be 0-200 pF. Some poor tuner designs don't have the L/C to load a random wire, let alone a dummyload under 7 Mhz. Another good tuner which is very easy to build is the L-network. The L uses a series inductor and a shunt capacitor at the output. You don't have to isolate the cap, as it's case must be grounded to chassis. I once built an L-tuner for QRP-CW out of a 360 pF variable cap and tapped inductor.

Bottom line:

Disregard ancient texts about exact length. With your tuner, a 110' wire will work as well as a 140' wire. Experiment with antenna and counterpoise length. Treat your counterpoise or radial(s) as a radiating part of the antenna rather than an electrical ground. I am in a temporary location and I am presently using a 120' to 140' (who's measuring?) wire about 20' average

height above ground. The tuner is an MFJ945D and I have also used my homemade L-tuner. My ground is a water pipe (boooo!). It's not a DX blaster antenna but I can make contacts on ALL bands.

72 Jay
WB6AAM (ARCI 5050)

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Mon, 26 Jun 1995 08:33:10 -0400 (EDT)
From: William McFadden <wmcfadde@oucsace.cs.ohiou.edu>
Subject: [1241] Field Day report
Message-ID: <199506261233.IAA24540@oucsace.cs.ohiou.edu>

Greetings, fellow QRPers!

Field Day 1995 is over. The Athens County (Ohio) Amateur Radio Association (ACARA) competed in category 1A from the County Fairgrounds. Our Field Day team consisted of six members, about half being CW ops, the other being Phone men. We operated under the callsign W8MHV. This was the first Field Day the ACARA has participated in as a club in several years.

We installed an 80/40m fan dipole between a large tree and a flag pole and a 15/20m fan dipole between two trees. We operated from an open picnic shelter, but had a tent in case the bugs got too bad--they didn't--and a mobile home in case the thunderstorms got too bad--they didn't. It didn't rain during set up, but did rain nearly all night.

Our rig was the club president's Argonaut 515, and we tried his newly-purchased MFJ 20m CW rig for a short while. The only significant problem we had was QRM; the Argonaut lacks an IF CW filter, and the Radio Shack DSP unit we tried wasn't ideal for the very crowded bands. (Our back-up rig was my HW-8, a fine rig for occasional use, but it would have been dreadful for Field Day! I'm glad we didn't have to use it!)

We ran off of batteries, being charged by a 28 watt solar panel. (I found the lack of generator noise to be very nice.)

I provided my Idiom Press CMOS Super Keyer II for the CW operations. The other two CW operators hadn't used a memory keyer before, and I think they are converts now--they both expressed interest in building their own.

We logged to an old, tiny, Sharp sub-notebook PC, using WR9Y software--it was a great program. We also logged to paper, Just In Case.

I haven't gone through the logs yet, but we made approximately 260 QSOs, mostly on CW. I don't know if this is a good score--I'll have to wait for the QST

results in November--but we felt good about our effort.

We set up after 1800z Saturday, to take advantage of the 27 hour operating period. We were very surprised to hear that the bands just shut down at 1800z Sunday, so the extra three hours we had were very unproductive. It appears that maybe we should have set up early. I speculate that most of the groups set up early, so they can't operate past 24 hours. Did most of the QRP-L subscribers set up early?

Eric.

--

W. Eric McFadden WD8RIF
wmcfadden@ohiou.edu

From qrp-l@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Mon, 26 Jun 95 8:19:13 MDT
From: Mike Robinson <miker@cc.com>
Subject: [1242] Re: Ladderline Fiasco
Message-ID: <9506261417.AA22253@voder.nsc.com>

Paul,

There's a subtle but interesting point to your story about testing the feedline while running it through your house.

It is readily apparent that your family thinks you're completely insane and has become used to it. Sort of like having a senial grandfather living with you.

You can tell because, instead of querying your actions, they seem to expect you to do something weird and they just ignore it, and work around it.

Have you ever caught them explaining to neighbors or friends, in a whisper, "He's a ham radio operator." While spinning their finger around their ear, indicating that you're not quite right in the head.

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7.3 de Michael aa0ub          | QRP:
miker@cc.com      Norcal #857  | "This thing's a radio?"
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From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Mon, 26 Jun 1995 16:32:47 MET
From: "Richard Hieber" <SZ0026@daphne.rrze.uni-erlangen.de>
Subject: [1243] Mizuho DC-7D schematics
Message-ID: <56D2773D8@daphne.rrze.uni-erlangen.de>

Hi gang,

for a friend of mine I am looking for the schematics of the Mizuho DC-7D rig. He got one without schematics, and something isn't working alright. I might have garbled the type name, but at least it sounds similar ;-)

Just came back from the Hamradio convention in Friedrichshafen. Had a nice time, but did a lot of running around and looking, so both eyes and feet grew weary. 21.000 visitors this year, a slight increase over last year. Had the pleasure of meeting George, G3RJV, and Dick, G0BPS, at the G-QRP Club booth and shaking hands with them. Nice guys! They were quite busy with visitors, and Dick sold a good many of his QRP crystals.

I spent a good deal of my money on books. Bought the two QRP books in German that there are on the market. One of them was probably not worth the money, but I didn't have time to do much more than a superficial scimming. The second one seems to be more profound, though. Then I happened upon Les Moxon's second edition of "HF antennas of all locations" which seems to be just marvellous. I love it! When I first opened the book I saw an impressive picture of an antenna which is essentially a two element delta loop but according to the mechanical construction it's called a Claw Antenna. Anyone else loves to fantasize about the construction of HF antennas, especially big wire contraptions? Well, I certainly do ;-). If I would shell out the money for three more 10m telescopic fibreglass rods (one I already have; three together are abt. USD 300), I'd be able to erect a nice fieldday antenna: a 30m fullsize two element loop antenna. A neat detail that my fevery brain has already worked out is the linear loading that the coiling of the wire along parts of the rods would provide. So a forty metres gain antenna is certainly feasible. The vendor of the most suitable type of fibreglass rods was already sold out on Sunday which kept me from being carried away. Gotta have to read more in Moxons book before I go into action. Big wire antennas is where the fun is!

Oh, before I forget: I had my homebrew 20m CW rig measured with professional equipment. I was prepared for the worst, but the results are very nice: 3.4 watts out, the first harmonic is 47dB down (the second only 45dB, but that's not bad either) and sensitivity is excellent: 0.16mV for 10dB S/N. It's a 20m CW rig from OHR

(has no fancy name but is apparently a predecessor of the 'Explorer') that I built into a homebrew enclosure. The technician commented to a bystander that this was only the fourth homebrew rig on this year's Hamradio that he had to do measurements on. The overall activity on homebrewing might be not as bad as this indicates since there were a few more booths fitted with lab equipment.

Unfortunately the local server went down during the weekend, so I am going to have to retrieve Saturday's and Sunday's postings from LEHIGH.EDU. Looking forward to read all the Fieldday reports ...

Vy 72

Richard

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Richard Hieber, DL8MFQ/AA8CP
sz0026@daphne.rrze.uni-erlangen.de

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Mon, 26 Jun 1995 08:47:08 -0600 (MDT)
From: "Timothy J. Pettibone" <tpettibo@NMSU.Edu>
Subject: [1244] FD Exercise
Message-ID: <Pine.A32.3.91.950626084416.76584B-100000@paris>

Had to stay home but operated my new QRP+ off of battery power. Antenna was Zepp up 15' (about 6-7- ft long, who measures?). Yep, the QRO stations weren't listening real good. Worked 60 in 33 sections in around 10 hours of operation all on 40/20m. Even snuck a few casual q's in on 30m! Had fun, already sent in my log to ARRL! Love my QRP+!

Tim AB50U

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Mon, 26 Jun 95 11:07:48 EDT
From: mitchell@dtcs70.dtc.Kodak.COM (Brad Mitchell)
Subject: [1245] WTB: HF project rig.
Message-ID: <9506261507.AA12073@dtcs70.dtc.kodak.com>

Hi guys.

I want a project rig. I would like one that does not work. Maybe it looks bad, scratched up etc. I like ten tec stuff, maybe yahoo. QRP is a plus :-).

I don't want something for nothing, but expect to pay what it might be worth.

I need something to keep my interest alive. For some reason I haven't felt like building radios lately. I think I'm having crosstalk between my hobby of restoring antique radios and ham radio.

73 Brad WB8YGG

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Mon, 26 Jun 1995 10:50:21 -0400
From: RobCap@aol.com
Subject: [1246] 4-Square Vertical Phased Array
Message-ID: <950626105020_102421829@aol.com>

Hello again. This year I used for Field Day a pair of "walking stick" verticals fed in phase, which provides a figure-8 pattern of gain (about 4db), broadside to the array. It worked great!

Encouraged by the results, I would like to experiment with a 4-Square Vertical Phased Array for next year, so that I can control the direction of gain from the operating position.

Does anybody happen to know whether or not there is either:

- a) a commercial manufacturer of a phasing control box for such an array, or
- b) a publication with easy to follow construction plans for building such a device.

I'm not monitoring the traffic on the QRP-list, so please address your response to me directly.

Thanks again.

72/73,

Rob, WA3ULH

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Mon, 26 Jun 1995 07:58:03 -0700
From: bobhigh@primenet.com (Bob Hightower)
Subject: [1247] More G5RV/30 meters
Message-ID: <199506261458.HAA02812@mailhost.primenet.com>

Well, with all the discussion on the effectiveness of the G5RV on 30 meters, and with Field Day being the perfect opportunity to string antennas, I used two antennae, at right angles to each other, one HB and one commercial, both

40' or better off the ground.

The HB antenna did indeed tune and work well on 30 meters (using a TS450SAT), while the commercial antenna did not. Hmmmmmm.... both are cut to the same length, and, purportedly, use the same wire. Only difference is in the center insulator. Obviously there is some other electrical difference that I don't have the expertise, equipment or time to measure.

Anyway, it seems that, with a good tuner, the G5RV will work on 30...maybe. Nothing definitive here, at all.

I strung the two antennas up at right angles as an experiment, using an antenna switch, to see what the difference in propagation would be for the states to the north of us. Not much, really. Some of the calls to the Eastern states were made with the wrong antenna, with better reports than from those on the antenna oriented that direction. But, there were no problems noted, seemingly no coupling of any kind, even though the ladder lines/feed lines were somewhat close. One benefit was that if I couldn't hear a station, I just flipped the switch, and, in most cases, there they were, much better. Have to do this again.

Also strung up the Bic Flamethrower. What a little jewel this is. Working with both the QRP+ and the NorCal 40A, it was an absolute wonder. Light, easy to erect and very easy to tune, this one is a keeper.

Hope all had a good time on Field Day, as we did at about 8000' in North Central Arizona. Look for you all at the fall QRP Afield.

73 Bob KI7MN

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: 26 Jun 1995 09:59:09 GMT
From: PB13128@deere.com
Subject: [1248] NOTE 06/26/95 09:59:25
Message-ID: <DACDXX21.PB13128.962559090095177FDACDXX21@TCP30.DX.DEERE.COM>

Subject: Field Day Results

Call: NN9K
Class: 1B (2 operators: K9WA & NN9K)
Section: IL
Power output: 5 watts. CW only

Band	QSO's
80	95
40	151
20	228
15	54

TOTAL	528

Equipment and antennas:

Radio: Icom IC-735

Antennas: 2 McCoy dipoles at 65 feet and 1 old, 1957 vintage tribander, at 20 feet.

Logging: Laptop powered from station battery supply runninn NA.

Ought to be more operating events (read: contests) that allow QRP power with single transmitter and 2 operators. Very relaxing!

Hope you all had fun,

72/73,

Pete, NN9K

pb13128@deere.com

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995

Date: Mon, 26 Jun 1995 11:13:01 -0400

From: Tom_Jennings <jennings@eng16.rochny.uspra.abb.com>

Subject: [1249] Re: Mizuho HF QRP rigs!

Message-ID: <jennings-9505261513.AA00046330@eng16>

In message M, Brian Carling says:

> This message was from JGRAMSEY to ALL,
 > originally in conference RADIOSWAP_
 > and was forwarded to you by BRIAN CARLING.

> -----

> SB xcvr

> Message-ID: <3sfsit\$b58@newsbf02.news.aol.com>

> Newsgroups: rec.radio.swap

> Organization: America Online, Inc. (1-800-827-6364)

>

> Give us a call at 1-716-924-4560 to see what stock we have available. We
> bought out the inventory of J-Com (which sold the Mizuho) and are closing
> them out at COST!

>

> 73, John Ramsey, Ramsey Electronics

> ---

I called Ramsey Electronics today and they have 80m, 17m, 15m and 10m in stock but not very many of each and the price is 249.95. Is this a reasonable price for the rigs?

TJ, kv2x

Thomas J. Jennings | Tel: (716) 273 7071
Senior Engineer | Fax: (716) 273 7262
ABB Industrial Systems Inc. |
Post Office Box 22685 |
Rochester, New York 14692-2685

Internet: jennings@jennings.rochny.uspra.abb.com

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Mon, 26 Jun 95 10:20:00 PDT
From: Johnson Russ <JohnsonR@rnd2.indy.tce.com>
Subject: [1250] Field Day Report
Message-ID: <2FEEEBF5@MSMAIL.INDY.TCE.COM>

Well my plans to get the club to use my new QRP+ for Field Day didn't work out too well. The others wanted to use a REAL rig ie Kenwood TS-690. That was ok I guess even though they should have at least given the QRP+ a try.

They started out at 5 watts but it wasn't long before they were turning the power up to 15 watts then to 50 watts so I said why stop at 50 just turn the thing up to 100 watts and forget QRP so they did.

When my turn came to operate I fired up the QRP+ and it really worked great.

I don't have the log sheet printout yet (used PC with CT logging program) so can't recap the numbers yet but I had very good success on CW. I didn't try SSB as I was the only CW Op this year.

My first session was 2:00 to 4:30 am Sunday morning on 80 Meters. Ran at about 25 per hour rate with one half hour with 25 contacts. It was all search and pounce as calling CQ didn't seem to net as many contacts. About 6:00 am Sunday I tried 40 for a while then the phone guys took over again.

There were two guys interested in the QRP+ and were very impressed with it but would not operate the EVENT (see Chuck, I remember it's NOT a CONTEST! hi hi). We did play around on 30 Meters a bit but the receiver was not happy with the other rig on 40 so next year I think I'll try band pass filters for 30, 12, and 17.

We had a fair turnout of ops, only a few hours of rain, and only one BIG thunderstorm (2 inches of rain in 40 minutes) so another successful Field Day.

Hope you all had fun too.

Russ Johnson N9RJ
johnsonr@indy.tce.com

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Mon, 26 Jun 1995 11:31:50 -0400
From: PDouglas12@aol.com
Subject: [1251] FD '95 and more
Message-ID: <950626113149_78443754@aol.com>

Here's my field day report.

Had four friends punk out--and it rained. So operated 1E alone at home and made 81 QSOs operating a few more hours than Nils (who easily takes first place for the best FD report.) Made 40 of the QSOs with the SW80 (Hello, Dave Benson, the new 2n3553 did the trick and it puts out a solid 1.5w. Must have blown the original with the spurious junk caused by putting the wrong toroid core in the xmt bfo. Thanks for the help.) Another discovery: RIT is not needed for FD!

No question, the CMOS II memories were the best anti-fatigue, anti-error aide ever. I will never contest again without it. Unpaid endorsement: The CMOS II by Idiom Press (see any QST, I don't have the address handy) is easily the best buy out there in memory keyers. I programmed one memory with the exchange. One had a FD CQ. One just my call sign (sent the exchange while logging--even grabbing a sip of caffeine--very easy.) Made only two QSOs calling CQ. That's about the right ratio--one out of forty QSOs calling CQ with one watt.

Ran all battery with SW80, NW80/20 on 40m, Explorer20, and old Digitrex on 20M SSB (one lousy phone QSO).

And Nils, I took the xyl to Chinatown for dinner (waited till Sunday night), got two kids off to camp, solved problems...

.. and took a lightning hit. It made a six inch scar from 40 feet up my big

tree down the bark into the ground, and underground to my gas line (no explosion, thank God.) Due to impulse/induced/ secondaries (who knows), we lost two tvs (just out of warrantee), two computers (warranteed) one phone and one alarm system, assorted light bulbs, and one GFI protected outdoor electrical circuit. Scared the crap out of us at 3am. Obviously, I wasn't operating. (I'm too old for all night contesting.) Rigs were grounded and d/c'd from all antennas, so no damage in the shack. I leave 'em that way when not in operation. You should too. Funny how it hit that tree 65 ft from my tower (attached to the back of the house) which is kept cranked down to 30' and is well grounded. Maybe it (the tower) protected the house under its umbra.

Preston WJ2V

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Mon, 26 Jun 1995 12:05:46 -0500
From: k1lgq@dennis.MV.COM (Dennis Marandos)
Subject: [1252] FIELD DAY - No challenge for my QRP!
Message-ID: <199506261605.MAA19627@mv.mv.com>

Field Day is over and I lost! I didn't just lose, but I went away weeping. My QRP rigs were NO match for the big guns out there is KW land. I set up station in Holderness, NH (Golden Pond) on Squam Lake and pitched three dipoles. I was on 20 and 30 and 40 meters, which was great. I had my extra car battery charged and ready for some serious number crunching activities. I was going to make some big scores on this contest if I had to stay up all night doing it.

When two o'clock in the afternoon rolled around, I was just finishing my last dipole. I ran into the shack (a screened area facing the lake) and 'got on.' Now the big BUT of contesting. I could hear them, but they couldn't hear me. I made two contacts (15 seconds a piece) in two hours. I was frustrated! I, for some unknown reason, brought my TS-450SAT and tried to make a few points with higher power. I filled 8 pages!

I believe the playing field is pretty lopsided with QRP and that the real contest will be this September 16 with QRP AFIELD. In that contest, the playing field will be level and all the players will be using the same tools. It's going to be a contest for QRPers, and not QROs!

As with all contests, there is the weather factor. On Saturday the WX was in the 80's with a gently breeze coming off the lake. When the contest was winding down, I could hear thunder in the background. At 1:45 EDT Sunday, I thought it was about time to remove the dipoles off the trees. I got all the wires down, the rigs all packed away, the car loaded and headed

for the direct road. Three minutes on the road, from the cabin site, the sky opened up and Armageddon poured for an hour of steady monsoon rain. BUT, I didn't get wet! :-)

I am looking, no I am gunning, for the QRP AFIELD in September! Watch out RF, here I come.

Dennis - K1LGQ
Editor- New England QRP Club newsletter

"I quickly laugh at everything, for fear of having to cry." -- Pierre de Beaumarchais

Dennis Marandos - K1LGQ, Nashua, NH

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Mon, 26 Jun 95 09:07:52 pst
From: dmitchel@mv.us.adobe.com
Subject: [1253] Re: qrp+ ... should I?
Message-ID: <9505268041.AA804182872@signum.mv.us.adobe.com>

My friend who borrowed both my QRP+ and somebody else's FT-840 said the QRP+ receiver is definitely better. But you have the sequence wrong. Order the QRP+ first and then sell the Yaesu. That way you'll have something to use during the 6-12 weeks you wait for the QRP+.

72,
david.

--

David Mitchell
Adobe Systems Incorporated david.mitchell@adobe.com
Bainbridge Ometepe Sister Islands Association davidm@uni.ni
Amateur Radio AB7DM*YN5NPM davidm@ab7dm.ampr.org
For a great pound of coffee dial 1-800-400-CAFE

----- Reply Separator -----

Subject: qrp+ ... should I?
Author: dcwill@ix.netcom.com at cc_smtp5
Date: 6/26/1995 4:27 AM

I am thinking of selling off my Yaesu FT-840 and picking up a QRP PLUS. Have any of y'all with QRP+s used the '840 or similar rigs? I've read some of the comments on the 'plus here, and it sounds good (wish the keyer had continuous rather than discrete speed control, could use a lamp for the LCD display...) and looks really neat. Mainly I'm curious how the 'plus's receiver compares to that of the '840.

Any other comments welcome, too.

Thanks in advance es 73 de dave / aa4zx/8
nr elkins, wv

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Mon, 26 Jun 1995 12:37:31 -0400
From: RobCap@aol.com
Subject: [1254] Twin Vertical Phased Array
Message-ID: <950626123703_102488425@aol.com>

You can see my article in Dec-94 QST on building a 1/4 wave antenna.

To build a Phased array with two antennas that has gain broadside to the axis of the array:

Two 1/4 wave antennas were spaced 1/2 wave apart. Each had eight 1/4 wave radials. Each had a length of 20-feet of RG8 coax fed into a Tee connection. From the Tee to the transmitter, any length of coax is fine, but the length from the antenna to the Tee is important, because a) the lengths must be equal for the antennas to be in phase, and b) the length determines the impedance.

The result is a gain antenna system that is ultra-portable and independent of location/trees etc. (i.e. can be set up even on a beach).

73,

Rob

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995

Date: Mon, 26 Jun 1995 09:42:20 -0700 (PDT)
From: H Smith <hbs@crl.com>
Subject: [1255] NORTEX FD
Message-ID: <Pine.SUN.3.91.950626092825.19789D-100000@crl.crl.com>

I would classify the NORTEX (North Texas) QRP Group Field day outing as a success.

We set up in a little park in Richardson Texas.

Antennas:

Loading up the rail road track that ran beside the park seemed to work but we encountered problems every time a train came by. It seems that when the road crossing gates went up, our antenna become rather discontinuous.

So we loaded up the cellular radio tower that was on other side of the park.

After virtually shutting down the North Dallas cellular corridor, we decided to revert to our back up antennas which was a pair of 140' long wires at 90 degree angles (no kidding). This gave us good coverage.

Participation:

We had 6 to 8 participants during the more sane hours and had 4 all-nighters.

The big push was to have a good time and to allow some of our less-experienced CW ops to have a go at a contest. We had success in both categories.

A note to Dennis, K1LGQ:

You are correct, it was tough, especially right after the starting gun. But using a few tricks, you can level the playing field and make lots of contacts. More on this next year.

Thanks to all who came out.

Smitty, and the NORTEX gang.

Henry Smith (hbs@crl.com)

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Mon, 26 Jun 1995 13:07:17 -0400 (EDT)
From: David Johnson <djohnson@acpub.duke.edu>
Subject: [1256] it's a dupe!
Message-ID: <Pine.ULT.3.91.950626124749.5245B-100000@bio3.acpub.duke.edu>

Hey gang!

Here is a true account of a really (at least to me) hilarious situation that happened when I went to visit the CFD (Chatham County Field Day) this past weekend. It was in the first hour or two of Sunday morning, local time. Paul Stroud, AA4XX, was kind enough to show me the 40m cw qrp station (connected to phased verticals) and to let me operate awhile. Bob, KE4NBC, was dupe checker at this position, and he stayed on while I began to operate. Paul was hanging around either in the tent or just outside for awhile, and I was using the headphones as a speaker (like I do at home a lot with the Sierra). I was using a pencil to copy calls and then told them to Bob, who checked for dupes. Paul was copying in his head, and several times would say "it's a dupe" immediately upon hearing the call. Well, I don't know how long he had been operating at this position, but it seemed that he had a good short-term memory, as he was invariably correct in these pronouncements. Ok, now for the funny part. Seems like six or seven times Paul made these judgements (correctly, as determined by Bob's checking the dupe sheet), and Paul wanders off from the tent. I keep operating with the headphones as speakers, and copy another call. Way off in the distance I hear this faint voice, a barely discernable whisper: "it's a dupe"! I looked for Paul and he had disappeared in the darkness, but must have been 50 feet away! Not only did he correctly remember all those calls, but he was copying the audio from the station when he was halfway across the field! I started laughing uncontrollably, and Bob did too (sorry to WA3ULH, Rob, operating in the same tent at another rig, who suffered some local qrm!), because we were straining our eyes in disbelief, trying to determine how far away Paul was! There wasn't too much light on the field, but that audio sure must have been weak in Paul's ears! Of course, when Bob checked the sheet, sure enough it WAS a dupe.

I went on to work some more stations, and had a great time operating. But the best part was the incident described above, when Paul demonstrated both his extraordinary short-term memory and his exquisite ability to copy the weak signals, with that unforgettable phrase from across the field: "it's a dupe!"

Have fun hammin'!

Dave

David W. Johnson	Power is no substitute for skill
Amateur Extra WA4NID	QRP ARCI 6546
email: djohnson@acpub.duke.edu	G-QRP 4864
packet WA4NID@KB4WGA.NC.USA.NA	NorCal 355

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Mon, 26 Jun 1995 10:00:40 -0700 (PDT)
From: "H. Ward Silver" <hwardsil@seattleu.edu>
Subject: [1257] Re: Twin Vertical Phased Array
Message-ID: <Pine.3.07.9506261032.A3396-b100000@bach.seattleu.edu>

There is a handy trick when constructing 2-element phased arrays to force current to be equal in both antennas, regardless of feedpoint impedance within limits. Feed each antenna with an odd number of quarter-wavelengths of feedline...the same odd number, of course, to keep the phase the same in both.

This is a consequence of transmission line characteristics, translating the voltage across the line where the feeds are tied together into a load current equal to the same voltage divided by the characteristic impedance of the feedlines.

If exact pattern symmetry isn't too important, then the feedlines can be any length, but current distribution may vary significantly. Pattern gain doesn't vary that much, but the depth of the pattern null is extremely sensitive to current balance.

The quick thinkers out there will have also realized that a quarter-wavelength of coax is significantly shorter than a free-space quarter-wavelength. So if you cut only a single quarter-wavelength for your feed lines, and space the antennas one half-wave apart, your face will be red as the feeds will be kinda short. Three quarter-wavelengths works just as well as one-quarter does.

We used a pair of HF2V's on the beach at W7FR over the weekend and had a fantastic 40-meter signal. I used an MFJ SWR Analyzer to set up the coils...it was a snap...took about five minutes for each antenna. The radial system was a piece of braid and several long wires tied to rocks, all of which were put into salt water. Yow!

It works well at home, too, you just need a bunch more radials. The HF2V's are often available for about \$100 used and are quite good on both 40 and 80. The 160-meter add-on kit makes them very effective dummy loads on 160 ;-)

73, Ward N0AX

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Mon, 26 Jun 1995 13:11:23 -0400
From: CQC@aol.com
Subject: [1258] Colorado QRP Club
Message-ID: <950626131122_78507210@aol.com>

Just got the July issue of CQ magazine. The listing of clubs on page 26 shows "No dues or membership fees" for the Colorado QRP Club. Not true. The annual dues for the club are and always have been \$10 per year.

Please let me know who is maintaining this list so it can be corrected. This is the second time it has been listed incorrectly.

Rich W0HEP
Colorado QRP Club

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Mon, 26 Jun 95 13:37:00 DST
From: "Diana, Gary M" <gmd@rfpo1.rfc.comm.harris.com>
Subject: [1259] N2JGU QRP FD95
Message-ID: <2FEEF07B@smtpgate.rfc.comm.harris.com>

Hello All -

Brad WB8YGG and I got together for a third QRP Field Day. We setup a tent, operating table, etc so we could operate the whole weekend regardless of the weather. We operated as N2JGU 1B WNY, QRP of course. Our QTH was approximately 40 miles west of Rochester NY.

Equipment: TenTec Argosy 80-10m SSB/CW
 HB Sudden RX/ Cubic Incher TX for 80M CW
 HB Epiphyte 75M SSB + 5 watt amp
 HB NN1G 80m CW
 misc. 2m fm equipment

We put up a 80m ladder line-fed dipole at about 35'. The site had just enough trees for the dipole, and had a great view toward the southwest. We setup Friday afternoon, and were getting s9 to 20 over signal reports from Ontario Canada, NY and PA on 75m Sideband at QRP power levels.

We made about 300 contacts (290 more than last year!), split 50-50 between SSB and CW. Most contacts were on 80m and 40m, with a few on 15m and 20m. One interesting note was that few things had to be repeated on the CW contacts! Was it better OPs, or the conditions? On Saturday morning we cobbled together a 4 element "Fred Flintstone" 2m Quad with #12 house wire, straight out of the Antenna Hdbk. It worked like a charm, but looked pretty primitive. That gave us comms back into the local Rochester repeater.

We went through two gel cells with the Argosy, and had a solar cell going which allowed us to monitor 2m for free. The wx was in the high 80s/low 90s and it was HUMID. A rain storm cooled things down for a while on Saturday, but then the high humidity returned.

Brad took some digital pictures with a camera he borrowed from work, and they should be appearing on the Internet soon. All in all we had a great time and have some ideas for a better FD next year. I guess it's back to reality now as we re-pay our wives for letting us get away for a radio weekend!

73 Gary N2JGU

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Mon, 26 Jun 1995 15:11:20 -0400 (EDT)
From: "Warren E. Lewis" <saswel@unx.sas.com>
Subject: [1260] Re: NORTEX FD
Message-ID: <199506261911.AA20839@cardamom.unx.sas.com>

----- H Smith writes -----

>

> You are correct, it was tough, especially right after the starting gun.
> But using a few tricks, you can level the playing field and make lots of
> contacts. More on this next year.

Nope...you can't get away with this...you need to tell us these little secrets now so we can use them now and forget them before FD next!!

I worked with my local radio club, which was QRO for FD. With the bands so congested and crazy during the test it was difficult trying to pull out the weaker ones. Even with a 250Hz filter cranked in...people were crammed all over top of each other. Doesn't seem like many folks know how to zero beat either. We had to leave the filtering open wide on the Kenwood TS450 we were using because people were calling us so far off frequency.

Another Note to Dennis:

Things seem to be better in the "real" contests for QRP folks. The ARRL Nov. SS, NA QSO Parties, and CQ WW contests seem to be a bit better to work as QRP. Also, the first couple hours of a contest is difficult as QRP because so many folks are calling and the big guns are trying to work as many as they can without working too hard. Later when their rates are down they will happily dig you out of the mud to get another contact in the log.

cheers - Warren

--

Warren E. Lewis
Technical Support Division
SAS Institute Inc.
Cary, NC

saswel@unx.sas.com
(919) 677-8001 x6542
PP-ASEL
AD4ZE DOD#0021

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Mon, 26 Jun 95 14:38:00 PDT
From: Johnson Russ <JohnsonR@ind2.indy.tce.com>
Subject: [1261] Field Day
Message-ID: <2FEF2975@MSMAIL.INDY.TCE.COM>

-----Warren E. Lewis writes-----

.. Doesn't seem like many folks know how to
.. zero beat either.

Thats one of the tricks, with QRP sounding different often helps!

Russ N9RJ
johnsonr@indy.tce.com

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Mon, 26 Jun 1995 13:14:58 -0700 (PDT)
From: H Smith <hbs@crl.com>
Subject: [1262] NORTEX FD - What we did
Message-ID: <Pine.SUN.3.91.950626124116.5340A-100000@crl8.crl.com>

On Mon, 26 Jun 1995, Warren E. Lewis wrote:

> Nope...you can't get away with this...you need to tell us
> these little secrets now so we can use them now and forget
> them before FD next!!

Ok, if you insist:-) We are not the experts, this was our first
fieldday. But we did sit down and think it out before we started.

1. Put up the best antenna that you can get in the area.

Mike Dooley, KE4PC, was the antenna chairman. All antenna credit goes
to him.

We put up two 140 ft long wires which were perpendicular to each other.
We used 3 20 ft poles for this. The antennas went right into the tuner,
nothin' fancy.

The idea was to position the lobes of the 2 wave 20 meter longwire
pointing to the NE, NW, SE and SW. The nulls were due North and South.
This gave us some gain in the directions we wanted.

Then lobes of the 1 wave 40 meter longwire were not as pronounced but
they were there never-the-less.

Mike kept track of the contacts on a map of the US and his predictions
were righ on, we worked 'em where we expected to.

Could have gotten by with one antenna.

Remember, you are competing with beams on 20m, so you need to level the
playing field a little. On 40 and 80, most stations use dipoles or
verticals. Not as hard to compete here.

Much more could (and probably will) be written on this subject.

2. We didnt start on 20 meters.

What a mess that was! After we heard that, we went down to 40 meters
where there were fewer stations. Just about everybody starts on 20.

Later on when we felt that the crowd would be moving to 40, we went to 20 and stayed there until late in the evening. Then we went to 40. By Sunday morning, it was all dupes :-)

Also, 15 opened up for a while.

Go where most stations ARENT.

Actually if you didnt start until 1900 or 2000 UTC it wont hurt. Let the riot subside a little.

3. We didnt bother with calling CQ.

Forget it if you think that you can hold a freq!

We started at one end and gradually worked our way to the other end. If the station didnt hear us after 2 or 3 calls, we moved on. Finesse and patience.

4, Other

Most stations cook along at 25-30 wpm, live with it.

If not sure, call any way.

Take breaks.

By dinner time on Saturday, your hotshot ops are hungry and go to din-din. Thats when they put in their new guys. That when our slower ops did their best.

etc.

Saturday, some of our less experienced CW ops jumped in there and made some contacts. As they gained experience and speed, their contact rate increased. By Saturday night, they ran the show and milked 20m and 40m dry.

We arent the experts and probably didnt place but just about every body made q's and had a good time.

Smitty for NORTEX

Henry Smith (hbs@crl.com)

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Mon, 26 Jun 1995 14:27:51 -0600 (MDT)
From: Rick Zabrodski <zabrodsk@med.ucalgary.ca>
Subject: [1263] Re: Twin Vertical Phased Array
Message-ID: <Pine.SUN.3.91.950626142654.10608A-100000@ume>

The above is fine for monoband performance....has anybody built a phasing box to allow multiband use? How did it work? Plans?

Dr. Rick Zabrodski BSc, MD, CCFP(E) * VE6GK
Email: zabrodsk@med.ucalgary.ca * NorCal 519 ARCI 7650 GQRP 8329
Phone 403-271-5123 Fax 403-225-1276 * "Power is no substitute for skill"

On Mon, 26 Jun 1995 RobCap@aol.com wrote:

> You can see my article in Dec-94 QST on building a 1/4 wave antenna.
>
> To build a Phased array with two antennas that has gain broadside to the axis
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>
> Two 1/4 wave antennas were spaced 1/2 wave apart. Each had eight 1/4 wave
> radials. Each had a length of 20-feet of RG8 coax fed into a Tee connection.
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> from the antenna to the Tee is important, because a) the lengths must be
> equal for the antennas to be in phase, and b) the length determines the
> impedance.
>
> The result is a gain antenna system that is ultra-portable and independent of
> location/trees etc. (i.e. can be set up even on a beach).
>
> 73,
>
> Rob
>
>

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Mon, 26 Jun 95 15:48:07 CDT
From: msdoooley@collie.aud.alcatel.com (Michael S. Dooley)
Subject: [1264] NE30-40 low power out
Message-ID: <9506262048.AA07197@collie.aud.alcatel.com>

Gang,
I haven't had time to really trouble shoot this, but my newly built

SW30 (the NE30-40 I believe) has only .7 watts out. This is not set at full outlut because it sounds like it's motorboating if I go to the max setting of the pot on the board. I'm going to look at it tonight, but was wondering if anyone else had a low power out problem with the SW30?

Mike KE4PC

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Mon, 26 Jun 95 16:46:00 PST
From: Johnson_Dan@AAC.COM
Subject: [1265] KC4EWT FD: fuse the battery!
Message-ID: <9506262359.22615.ab@SMROUTER.AAC.COM>

Content-Type: text/plain; charset=US-ASCII

Having participated in club FD activities in the past, KC4EWT's tiny shingle wafted gently in the ionospheric breeze for the first time. The effort was rewarded by satisfaction which exceeds the contest score.

The goals were to make and test fixtures necessary to run from battery power and to operate a QRP FD station. Lessons learned:

1. FD can be done without widowing the family.
2. QRO FD is too easy, QRP puts the spice back, though it's easy (essential, perhaps) to forget that you're QRP because it doesn't matter as much as you'd expect.
3. Less important than power is hitting the sweet spot of the other station's receive filters.
4. It takes more time and planning than expected to convert one's station from power mains to battery power.
5. Fuse the battery (hi).

Locating the station in a sweaty but nearly bug-free wooden shed in the backyard provided less than optimal operating conditions while maintaining the ubiquitous balance between hamming and family responsibilities.

In QRO (100W) years past, I could snare most anyone I could hear. That wasn't the case with QRP, but with surprisingly few exceptions, it seemed like the most influential factor was whether my 5W hit the right part of the receiving station's passband. Excursions of +/-400

Hz from apparent zero-beat often netted contacts. I conjecture that this was necessary either to get all of my signal inside their passbands or to hit the right audio pitch in their earphones. With a 250 Hz IF filter, RIT proved the most important transceiver feature.

A single deep-cycle marine battery, one of twins acquired to feed 24V to boatanchors, powered the event with plenty to spare. Construction projects included a power distribution box, cables, and a light source. I was too hasty constructing the power cable for the tuner meter's lamp. The coaxial power plug's terminals shorted near the end of FD, and the fried conductor acted like a toaster instead of a fuse, hence the lesson above about fusing the battery.

The ICOM 745, internally tweaked to run 2W minimum, ran 5W throughout the contest. This was my first opportunity to measure its power consumption. With a dead meter light, it drew 0.95A RX and 5.4A TX. For me, this emphasizes the distinction between ricebox and "true" QRP technology.

In 60 contacts over 7 operating hours with 5W on 40M and 20M, I worked 33 sections in all but call district 3, spanning the U.S. in every direction and including 3 Canadian sections. Not spectacular, but not disappointing, either. There were some good ears, with good operators between then, out there. I only worked one other "B" class, K90M, but plenty of others were out there working "turf" stations.

KD4DFD dropped by to try his hand after 2000Z, but by then it became difficult to find contacts amidst QSOs.

Bottom line: despite the limited operating time and a "miserable" score by competitive standards, it was well worth the effort and well worth repeating.

My expectations this year were realistic resulting in no disappointment. Next year, I'll expect to put a more efficient HB transceiver on the air and to improve the score from this year. One step at a time, guaranteed pleasure.

72 de KC4EWT EWT 1B 1B VA VA TU

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Mon, 26 Jun 95 14:24:11 PDT
From: dh@deneb.csustan.edu (Doug Hendricks)
Subject: [1266] Zuni Loop FD Rpt.
Message-ID: <9506262124.AA25789@deneb.csustan.edu>

The eleventh annual Zuni Loop Mountain Expeditionary Force made their assault on Field Day from the Zuni Loop of the Table Mountain Camp Ground near Wrightwood, California. The campground is at an elevation of 7200 feet, and has a clear shot at the East. It is located about 50 miles Northeast of Los Angeles and is at the tip of the Sierra Nevada range.

The Zuni Loop Mountain Expeditionary Force was started in 1985 by Bob Spidell, W6SKQ, (who became a silent key in 1993), Fred Turpin, K6MDJ, and Cam Hartford, N6GA. It has always been a QRP Field Day operation, and has grown in size as the members have invited guests, who in turn have returned and invited others. The way that it has worked is that the first time you are a guest, and if you prove to be compatible with the group, then you become a member of the Expeditionary Force.

I first learned of the Zuni Loopers by reading accounts that were published in the QRP Quarterly, the Journal of the ARCI. Those accounts were like feeding candy to an orphan, I wanted more and I wanted to be part of it. It became a dream of mine, to go to Field Day with the Zuni Loopers. Then, in the spring of 1993, I came in contact with Richard Fisher, KI6SN who just happened to be a member of the Zuni Loopers. He invited me to attend, and I have been going back ever since. It is like Dayton, once you have been, you have to return.

The Zuni Loopers have been through a lot in their trials and tribulations of fighting the Field Day Wars. Bears have raided the camp. There was an earthquake one year, and in 1994 there was the Wrightwood Forest Fire that was only 2 miles from the sight. It burned for several days before it was brought under control. But through it all, the Zunis have prevailed.

This year there were 17 operators with a total of 75 years of Zuni Loop experience! Here is the list:

Fred Turpin, K6MDJ - 11 Years

Cam Hartford, N6GA - 10 Years (he missed on his 25th wedding anniversary)

Keith Clark, W6SIY - 9 Years

Rob Roberts, N7FEG - 9 Years

Richard Fisher, KI6SN - 6 Years

Ralph Irons, AA6UL - 5 Years

Kim Irons, KD6WJK - 4 Years

Clark Turner, WA3JPG - 4 Years

Doug Hendricks, KI6DS - 3 Years

Charlie Lofgren, W6JJZ - 3 Years

Wayne Burdick, N6KR - 3 Years

Tom Brown, W6JHQ - 3 Years

Vern Wright, W6MMA - 1 Year

Jon Iza, EA2SN - 1 Year

Tony Gasparovic, N6OAT - 1 Year

Paul Carreiro, N6HCS - 1 Year

Bob Heusser, K6TUY - 1 Year

Fred operated 40 meter CW along with Tony and Paul. Cam, Keith and Wayne were on 20 and 80 CW, while Clark held down 15 CW and Phone and Rob

did the same with 10 CW and Phone. Richard operated 2 M simplex, Tony and Paul helped with 2 M packet. Clark also did some 6 M phone and 1 6M CW contact. Ralph had the 40 SSB station, and Vern and Doug worked 20 and 75 SSB. Tom, Jon, Kim and Bob logged and Charlie (who is better known in Zuni circles as Charlie Tuner, was in charge of the tuners).

The Zunis are serious and famous for their antennas, and this year no exception. Here is the list, and please don't drool when you read this.

2 Meter Simplex	5 Element Homebrew DNA Quad. (Richard cut his thumb while building it, and it took 3 stitches to close the bloody wound. If he would have been involved in a criminal activity even the LA police would have had plenty of evidence.)
2 Meter Packet	Stacked Yagis, Top 4 element, bottom 3 element.
6 Meter Phone & CW	Dipole at 60 Feet.
10 Meter Phone & CW	Homebrew ZL Special, 2 element beam.
15 Meter Phone & CW	Homebrew ZL Special, 2 element beam. This is the W6SKQ Memorial Antenna. Bob Spidell built this antenna, and it is priceless to the Zuni Loopers. Bob watches us every year, and he is pleased that we think of him when we see his antenna.
20 Meter CW	6 Shooter. Made of 6 phased dipoles at 100' Dipole at 50'
20 Meter SSB	5 element Yagi at 55 feet on a rotatable Army Surplus tower.
40 Meter CW	Skelton Cone at 40 feet.
40 Meter Phone	3 element Inverted V Beam at 80 feet.
75 Meter Phone	Inverted V at 50 feet.
	Skelton Cone at 40 feet (same antenna as 20 meter phone, fed with homebrew ladder line and a tuner)
	Half Square at 62 feet. Half wave horizontal element (128') with quarter wave vertical elements.
80 Meter CW	W8JK which is 2 parallel full wave dipoles that are phased with 1/8 wave spacing at 90 feet.

Thirteen antennas, and what an antenna farm. Even Vern, W6MMA who has the best antenna system that I have ever seen was impressed. It took several hours to erect them, but boy is it worth it. The old sage about the antenna being worth 99 times more than power is certainly true at QRP levels. The question many of you are probably asking is how do they get those antennas so high? It is simple my friend. Table Mountain has hundreds of pine trees that are over 120 feet tall. The Zunis use a modified slingshot called a Wrist Rocket. They have added a Zebco 33 fishing reel to the front by clamping two 3/16" rods to the slingshot with cable clamps, and then mounting the fishing reel to the rods.

Fred Turpin is a master at shooting 3/4 ounce fishing sinkers over a tree limb. In the past Fred has used 4 lb. monofilament line, but this year he used 6 lb. test and it worked much better. Fred shot 2 antennas for me, and both of them were done the first time. The process is simple, first the sinker and monofilament line, then heavy nylon string, then a small rope, if needed, with one line pulling up the other in sequence.

What about rigs? This year the Zunis decided to concentrate on using homebrew rigs. This was brought about by the emergence of all the great kits in the past 3 years. Here is a list of the rigs and homebrew accessories that we had at Field Day this year. We took a picture of all the rigs on a table, and you will get a chance to see it as it will be published in QRPP.

- OHR SCAF Filter
- OHR Sprint 30 Meters
- OHR Sprint 40 Meters
- OHR Explorer 40 Meters (2)
- Cascade SSB 20 & 75 (2)
- Epiphyte SSB 75 (2)
- MFJ 9420 SSB 20
- OHR Classic 20 & 40 CW
- OHR WM1 Wattmeter (2)
- CMOS Super Keyer II (4)
- Sierra (4)
- Homebrew 20 & 40 Meter Transceiver
- SWL 40-40
- Mizuho 40
- Mizuho 6
- St. Louis Tuner
- NorCal 40 (4)
- NorCal 40A
- Homebrew Paddles
- Junction Box
- Z Match Tuners (5)
- R2/T2 (Hands Linear, T2 Transmitter, R2 Receiver, Differential T Match, Low Pass Filter, W1FB Universal VFO)
- Curtis Keyer (2)
- HW-9 (2)
- Argonaut 515 (4)
- Yaesu FT 890
- Yaesu FT900
- Neophyte Receiver
- Icom 502
- HTX 202
- Kenwood TS140
- Army Surplus 55 Foot Rotatable Tower

As you can see we had quite an array of equipment, with 90 percent of it homebrew. How did we do? Well, we made 1039 contacts, and we think that we were in Class 6A. Cam will go over the logs and determine our exact

class. Our point total was over 8000. The all time Zuni record for Qso's is 1199 set in 1993, and it was our goal to break it this year. But, we fell a little short. One of the problems that we had with the home brew rigs was that the Sierra was interfering with the Cascade on 20 and 80 and the Cascade was likewise getting into the Sierra. The front ends need to be beefed up if they are going to be used in a field day type of situation. The Cascade that we were using did not have the RF gain control hooked up, (prototype), and we certainly could have used it. This is a call to all of you. Someone needs to design some type of filter to keep the two rigs from bothering each other when they are used in close proximity. Even with the RF control on the Sierra, the interference from the Cascade was still there. Plus by turning the RF down so far, the signals were being attenuated by 30 dB!! To solve the problem, we started trading operating time, with the CW stations going for an hour and the SSB for an hour. Then when 75 opened, the 20 SSB station closed and we worked 75 SSB and 20 CW with no problems.

It was great fun and I certainly enjoyed the weekend with the Zunis. It was worth the 300 mile trip one way. I will be back next year.

Guys, I have pictures of the Zuni FD and would love to have a write up and pictures of your FD exploits. Please send them to me via private email stating that I have permission to print in QRPP. Also, if you can send pictures it will be neat to add those too! Pick out one or two shots and send me a copy. I will not be able to return the photos, so please send extras!! Just make sure they are clear and show lots of contrast (its easy to see detail!!).. 72, Doug, KI6DS

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Mon, 26 Jun 1995 17:31:32 -0400
From: JessQRP@aol.com
Subject: [1267] Re: NE30-40 low power out
Message-ID: <950626173129_102690473@aol.com>

Yup,

Same problem that I have with mine. I talked with Dave NN1G about this and that is a common occurrence with the rig on this band. With real careful tuning, I can get mine up to a whopping 1 watt out, but the quality of the keyed signal goes in to the dumper. Dave had suggested changing one of the 5 pf caps in the TX mixer to 10 pf, but I don't have the schematic with me that I marked it on. That is about the best you can do with this rig, with a little tweaking, you might be able to get a bit more out of it. Also, check your power supply input voltage and make sure that you have as near to 13.8 as you can get, this will make a difference on the output power. Dave claims that even the 40 meter version starts to get a little puny on output power near 10 volts...

I am still in the process of dinking with mine to see if I can squeeze a bit more out of it, but still manage to work a few even with the power putput down....

Best

Jess NOTFI

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Mon, 26 Jun 1995 15:43:19 -0600 (MDT)
From: "Timothy J. Pettibone" <tpettibo@NMSU.Edu>
Subject: [1268] Please post your FD Call
Message-ID: <Pine.A32.3.91.950626154237.76788A-100000@paris>

Great stories coming out re:FD but I can't go back to my log and find out who I worked if you don't post your FD call! Thanks.

Tim AB50U

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Mon, 26 Jun 95 16:47 EST
From: Charles Fulp Jr <0006313915@mcimail.com>
Subject: [1269] K3WW QRP+ 1BBattery 1 OP
Message-ID: <21950626214712/0006313915PK3EM@MCIMAIL.COM>

1996 Field Day Report

K3WW 1 B Battery, 1 operator
Pennridge High School Field (50 feet from my drive way)
Equipment QRP+, Azden mobile 2 meter radio, Icom HT and PacComm Handi Packet, Laptop computer. Gel Cells and Deep Cycle Marine batteries for power, plus fluorescent battery powered lamp to view LEDs. Past 4 years just used the glow of the screen and display of the IC 751A.
Antennas. 80 40 inverted V dipole, center about 55 feet up on fold over/telescopic mast of my own design. 20/15/10 dipole (the 40 dipole worked better for 15) single feed line center supported on same mast at about 50 feet. Hustler mobile antenna on van used for a few QSOS, 2 meter whip for 10 VHF (2FM) QSOS., rubber duckie antenna for packet.
Location, close home, in a valley, hill to north rises 300 feet in about 1/4 mile, other directions are not obstructed for some distance.
Results:
80 CW 278

40 CW 237
20 CW 124
15 CW 64
Packet 90
2 FM 10

Looks like 7,980 points for contacts, plus most of the Bonus points except for Satellite and (blush) Natural Power.

The receiver in the QRP+ worked fine, it was never the limiting factor in making contacts. Had very high noise on 20 and above at times, but 80 was extremely quiet this year. I use dipoles because they are simple, and predictable. I think the energy needed to put up a beam or more complex antenna system would be counter productive to the operating portion of the event, for a 1 man operation.

This may be very close to a new 1 B battery 1 Operator record, I couldn't break it with my IC751-A, but more guys were on packet and conditions were close to ideal for my set up. The 5 multiplier, in my opinion puts QRP stations at an insurmountable advantage in Field Day, if point totals are important to you. Some day it would be fun to go for the all time point record, with a good QTH, big antennas and a dozen or more QRP stations.

73 Chas. K3WW CFULP@MCIMAIL.COM

June 26, 1995

From qrp-1@lehigh.edu Mon Jun 26 18:56:58 1995
Date: Mon, 26 Jun 1995 18:05:01 -0400
From: teda@meaddata.com (Ted Albert)
Subject: [1270] Re: NE30-40 low power out
Message-ID: <9506262205.AA07185@rain.meaddata.com>

I had the motorboating problem too and found it got better once I placed it in the case, however, it still isn't the greatest on the sidetone at 1.5 watts. My output adjustment via r2 is not smooth. I can either set it to .5 watts or it jumps to 1.5 watts.

73 de Ted, KF8EE

> From qrp-1@lehigh.edu Mon Jun 26 16:52 EDT 1995
> Reply-To: msdooley@collie.aud.alcatel.com
> Originator: qrp-1@lehigh.edu
> Sender: qrp-1@lehigh.edu
> Precedence: bulk
> From: msdooley@collie.aud.alcatel.com (Michael S. Dooley)
> To: Multiple recipients of list <qrp-1@lehigh.edu>
> Subject: NE30-40 low power out
> X-Listprocessor-Version: 6.0c -- ListProcessor by Anastasios Kotsikonas
> X-Comment: Low Power Amateur Radio Discussion

> Date: Mon, 26 Jun 1995 16:49:35 EDT

> Content-Type: text

> Content-Length: 379

> X-Lines: 9

> Status: R0

>

> Gang,

> I haven't had time to really trouble shoot this, but my newly built

> SW30 (the NE30-40 I believe) has only .7 watts out. This is not set at

> full outlut because it sounds like it's motorboating if I go to the max

> setting of the pot on the board. I'm going to look at it tonight, but was

> wondering if anyone else had a low power out problem with the SW30?

>

> Mike KE4PC

>

>